

Chemical Physics 190 (1995) 446-449

Author index to volume 190

Abbouti Temsamani, M., see J. Liévin	190 (1995) 419
Ågren, H., see B. Minaev	190 (1995) 11
Ainetschian, A., G.T. Fraser, B.H. Pate and R.D. Suenram, High-order torsional couplings	
in the infrared spectrum of 3,3,3-trifluoropropene	190 (1995) 231
Allcock, P., see D.L. Andrews	190 (1995) 1
Alvarez, I., see H. Martínez	190 (1995) 139
Andrews, D.L., P. Allcock and A.A. Demidov, Theory of second harmonic generation in	
randomly oriented species	190 (1995) 1
Andrews, S.R., see C.J. Reid	190 (1995) 113
Applequist, J., Fundamental relationships in the theory of electric multipole moments and	
multipole polarizabilities in static fields (Chemical Physics 85 (1984) 279-290). Erratum	190 (1995) 153
Ballantine, J.A., see C.J. Reid	190 (1995) 113
Bartels, D.M., see K.H. Schmidt	190 (1995) 145
Bennett, F.R., A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+}	190 (1995) 53
Boraas, K. and J.P. Reilly, The $3\nu_1 + \nu_3$ vibrational overtone spectrum of $^{13}\text{CH}_4$	190 (1995) 301
Borin, A.C. and F.R. Ornellas, A theoretical study of the transition moments, Einstein A	
coefficients, and radiative lifetimes of the lowest triplet states of BeC	190 (1995) 43
Borro, A.F., I.M. Mills and A. Mose, Overtone spectra and anharmonic resonances in	
haloacetylenes	190 (1995) 363
Borsenberger, P.M., see M. Van der Auweraer	190 (1995) 31
Botschwina, P., B. Schulz, M. Horn and M. Matuschewski, Ab initio calculations of	
stretching vibrational transitions for the linear molecules HCN, HNC, HCCF and HC ₃ N	
up to high overtones	190 (1995) 345
Brock, A., see C. Manzanares I.	190 (1995) 247
Bruun, G., see M.S. Child	190 (1995) 373
Buenker, R.J., see P. Jensen	190 (1995) 179
Bunker, P.R. and C. Di Lauro, Dimethylacetylene: the theory required to analyse the in-	
frared and Raman perpendicular bands	190 (1995) 159
Bylicki, F., see R. Georges	190 (1995) 207
Campargue, A., see R. Georges	190 (1995) 207
Carrasquillo M., E., see A.L. Utz	190 (1995) 311
Charvat, A., see R. Georges	190 (1995) 207
Chenevier, M., see R. Georges	190 (1995) 207
Child, M.S., G. Bruun and R. Paul, Short time quantum phase space dynamics at a 1:2	
Fermi resonance	190 (1995) 373

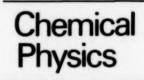
Cisneros, C., see H. Martínez	190 (1995) 139
Coxon, J.A., see P.I. Presunka	190 (1995) 139
Crim, F.F., see A.L. Utz	190 (1995) 311
, , ,	1,0 (1,,0)
Delon, A., see R. Georges	190 (1995) 207
Demidov, A.A., see D.L. Andrews	190 (1995) 1
Demtröder, W., see Ch. Hornberger	190 (1995) 171
Denda, T., see N. Matsuda	190 (1995) 83
De Schryver, F.C., see M. Van der Auweraer	190 (1995) 31
De Urquijo, J., see H. Martínez	190 (1995) 139
Di Lauro, C., see P.R. Bunker	190 (1995) 159
Di Lonardo, G., see E. Venuti	190 (1995) 279
Ferracuti, P., see E. Venuti	190 (1995) 279
Fraser, G.T., see A. Ainetschian	190 (1995) 231
Fuentes, B.E., see H. Martínez	190 (1995) 139
Fusina, L., see E. Venuti	190 (1995) 279
Gambogi, J.E., R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles, Intramolecular vibrational dynamics of diacetylene and diacetylene- d_1 via eigenstate-resolved over-	
tone spectroscopy	190 (1995) 191
Gaspard, P., see J. Liévin	190 (1995) 419
Georges, R., A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel, Jet cooled NO ₂ intra cavity laser absorption spectroscopy (ICLAS) between	170 (1775) 117
11200 and 16150 cm	190 (1995) 207
Handy, N.C., see P. Palmieri	190 (1995) 327
Harris, F.M., see C.J. Reid	190 (1995) 113
Held, A. and M. Herman, High resolution spectroscopic study of the first overtone of the	()
N-H stretch and of the fundamentals of the C-H stretches in pyrrole	190 (1995) 407
Herman, M., see A. Held	190 (1995) 407
Herman, M., see J. Liévin	190 (1995) 419
Hirsch, G., see P. Jensen	190 (1995) 179
Hochstrasser, R.M., see B. Locke	190 (1995) 155
Horn, M., see P. Botschwina	190 (1995) 345
Hornberger, Ch., M. König, S.B. Rai and W. Demtröder, Sensitive photoacoustic overtone spectroscopy of acetylene with a multipass photoacoustic cell and a colour centre laser	,
at 1.5 μ m	190 (1995) 171
Hühn, M.M., see P. Palmieri	190 (1995) 327
riunn, M.M., see P. Painneri	190 (1993) 327
Jensen, P., Y. Li, G. Hirsch, R.J. Buenker, T.J. Lee and I.N. Kozin, Fourfold clusters of	
rovibrational energies in H ₂ Te studied with an ab initio potential energy function	190 (1995) 179
Jonsson, D., see B. Minaev	190 (1995) 11
Jost, R., see R. Georges	190 (1995) 207
Kakitani, T., see N. Matsuda	190 (1995) 83
Kierzkowski, P., R. Ławruszczuk and A. Kowalski, Chemiluminescence quasi-continua in	, , , ,
collisions of Ca(1S), Sr(1S) and Mg*(3P) atoms with I ₂	190 (1995) 131

König, M., see Ch. Hornberger	190 (1995) 171
Kowalski, A., see P. Kierzkowski	190 (1995) 131
Kozin, I.N., see P. Jensen	190 (1995) 179
Ławruszczuk, R., see P. Kierzkowski	190 (1995) 131
Lee, T.J., see P. Jensen	190 (1995) 179
Lee, YY., see S.D. Price	190 (1995) 123
Lehmann, K.K., see J.E. Gambogi	190 (1995) 191
Lehmann, K.K., see J.H. Timmermans	190 (1995) 393
Leone, S.R., see S.D. Price	190 (1995) 123
Li, Y., see P. Jensen	190 (1995) 179
Lian, T., see B. Locke	190 (1995) 155
Liévin, J., M. Abbouti Temsamani, P. Gaspard and M. Herman, Overtone spectroscopy and	
dynamics in monodeuteroacetylene (C ₂ HD)	190 (1995) 419
Locke, B., T. Lian and R.M. Hochstrasser, Determination of Fe-CO geometry and heme	
rigidity in carbonmonoxyhemoglobin using femtosecond IR spectroscopy (Chemical	
Physics 158 (1991) 409-419). Erratum	190 (1995) 155
Manning, M., see S.D. Price	190 (1995) 123
Manzanares I., C., J. Peng, N. Mina-Camilde and A. Brock, Overtone spectroscopy of iso-	()
butane at cryogenic temperatures	190 (1995) 247
Martínez, H., B.E. Fuentes, I. Alvarez, C. Cisneros and J. de Urquijo, Single and double	
electron capture in H ⁺ on Kr collisions at low-keV energies	190 (1995) 139
Mataga, N., see N. Matsuda	190 (1995) 83
Matsuda, N., T. Kakitani, T. Denda and N. Mataga, Examination of the viability of the Collins-Kimball model and numerical calculation of the time-dependent energy gap law	
of photoinduced charge separation in polar solution	190 (1995) 83
Matuschewski, M., see P. Botschwina	190 (1995) 345
Mills, I.M., see E. Venuti	190 (1995) 279
Mills, I.M., see A.F. Borro	190 (1995) 363
Mina-Camilde, N., see C. Manzanares I.	190 (1995) 247
Minaev, B., P. Norman, D. Jonsson and H. Ågren, Response theory calculations of singlet-	
triplet transitions in molecular nitrogen	190 (1995) 11
Mose, A., see A.F. Borro	190 (1995) 363
Norman, P., see B. Minaev	190 (1995) 11
Ornellas, F.R., see A.C. Borin	190 (1995) 43
Orr, B.J., Collision-induced state-to-state energy transfer in perturbed rovibrational mani-	
folds of small polyatomic molecules: mechanistic insights and observations	190 (1995) 261
Palmieri, P., R. Tarroni, M.M. Hühn, N.C. Handy and A. Willetts, An improved anhar-	
monic force field of CHClF ₂	190 (1995) 327
Pate, B.H., see A. Ainetschian	190 (1995) 231
Paul, R., see M.S. Child	190 (1995) 373
Pearson, R.Z., see J.E. Gambogi	190 (1995) 191
Peng, J., see C. Manzanares I.	190 (1995) 247
Presunka, P.I. and J.A. Coxon, Laser excitation and dispersed fluorescence investigations	
of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of SrOH	190 (1995) 97

Price, S.D., YY. Lee, M. Manning and S.R. Leone, Laser photodissociation of fluorinated	
molecular dications	190 (1995) 123
Puhovski, Y.P. and B.M. Rode, Structure and dynamics of liquid formamide	190 (1995) 61
Rai, S.B., see Ch. Hornberger	190 (1995) 171
Reid, C.J., J.A. Ballantine, S.R. Andrews and F.M. Harris, Charge inversion of ground-state and metastable-state C ₂ ⁺ cations formed from electroionised C ₂ H ₂ and C ₂ N ₂ , and a re-	
evaluation of the carbon dimer's ionisation energy	190 (1995) 113
Reilly, J.P., see K. Boraas	190 (1995) 301
Rode, B.M., see Y.P. Puhovski	190 (1995) 61
Schmidt, K.H. and D.M. Bartels, Lack of ionic strength effect in the recombination of hy-	
drated electrons: $(e^-)_{aq} + (e^-)_{aq} \rightarrow 2(OH^-) + H_2$	190 (1995) 145
Schulz, B., see P. Botschwina	190 (1995) 345
Scoles, G., see J.E. Gambogi	190 (1995) 191
Scoles, G., see J.H. Timmermans	190 (1995) 393
Stoeckel, F., see R. Georges	190 (1995) 207
Suenram, R.D., see A. Ainetschian	190 (1995) 231
Tarroni, R., see P. Palmieri	190 (1995) 327
Timmermans, J.H., K.K. Lehmann and G. Scoles, The intramolecular dynamics of allene	
in the region around 6000 cm ⁻¹ via eigenstate resolved IR spectroscopy	190 (1995) 393
Tobiason, J.D., see A.L. Utz	190 (1995) 311
Troe, J., Simplified models for anharmonic numbers and densities of vibrational states. I.	
Application to NO ₂ and H ₃ ⁺	190 (1995) 381
Utz, A.L., E. Carrasquillo M., J.D. Tobiason and F.F. Crim, Direct observation of weak	
state mixing in highly vibrationally excited acetylene	190 (1995) 311
Van der Auweraer, M., G. Verbeek, F.C. De Schryver and P.M. Borsenberger, An assess-	
ment of the role of polaron formation to hole transport in a triarylamine doped polymer Venuti, E., G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills, Vibration-rotation spec-	190 (1995) 31
tra of ¹³ C containing acetylene: anharmonic resonances	190 (1995) 279
Verbeek, G., see M. Van der Auweraer	190 (1995) 31
Watson, J.K.G., The vibration-rotation spectrum and anharmonic potential of H ₃ ⁺	190 (1995) 291
Willetts, A., see P. Palmieri	190 (1995) 327
Yang, X., see J.E. Gambogi	190 (1995) 191



Chemical Physics 190 (1995) 450-459



Subject index to volume 190

Methods

Theoretical

Group theory and algebras	
Dimethylacetylene: the theory required to analyse the infrared and Raman perpendicular bands, P.R. Bunker and C. Di Lauro	190 (1995) 159
Classical mechanics	
Short time quantum phase space dynamics at a 1:2 Fermi resonance, M.S. Child, G. Bruun and R. Paul	190 (1995) 373
Quantized field theory	
Theory of second harmonic generation in randomly oriented species, D.L. Andrews, P. Allcock and A.A. Demidov	190 (1995) 1
Coupling schemes and perturbative treatments	
Response theory calculations of singlet-triplet transitions in molecular nitrogen, B. Minaev, P. Norman, D. Jonsson and H. Ågren	190 (1995) 11
Vibration-rotation spectra of ¹³ C containing acetylene: anharmonic resonances, E. Venuti, G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills	190 (1995) 279
Transport quantum mechanics	
An assessment of the role of polaron formation to hole transport in a triarylamine doped polymer, M. Van der Auweraer, G. Verbeek, F.C. De Schryver and P.M. Borsenberger	190 (1995) 31
Statistical mechanics of stationary states	
Simplified models for anharmonic numbers and densities of vibrational states. I. Application to NO ₂ and H ₃ ⁺ , J. Troe	190 (1995) 381
Ab initio schemes for stationary properties	
Response theory calculations of singlet-triplet transitions in molecular nitrogen, B. Minaev, P. Norman, D. Jonsson and H. Ågren	190 (1995) 11
A theoretical study of the transition moments, Einstein A coefficients, and radiative lifetimes of the lowest triplet states of BeC, A.C. Borin and F.R. Ornellas	190 (1995) 43

Overtone spectroscopy of isobutane at cryogenic temperatures, C. Manzanares I., J. Peng,	100 (1005) 247
N. Mina-Camilde and A. Brock An improved anharmonic force field of CHClF ₂ , P. Palmieri, R. Tarroni, M.M. Hühn,	190 (1995) 247
N.C. Handy and A. Willetts	190 (1995) 327
Ab initio calculations of stretching vibrational transitions for the linear molecules HCN, HNC, HCCF and HC ₃ N up to high overtones, P. Botschwina, B. Schulz, M. Horn and	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M. Matuschewski	190 (1995) 345
Computational and simulation methods	
A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+} , F.R. Bennett	190 (1995) 53
Structure and dynamics of liquid formamide, Y.P. Puhovski and B.M. Rode	190 (1995) 61
Examination of the viability of the Collins-Kimball model and numerical calculation of the time-dependent energy gap law of photoinduced charge separation in polar solution,	
N. Matsuda, T. Kakitani, T. Denda and N. Mataga	190 (1995) 83
The vibration-rotation spectrum and anharmonic potential of H ₃ ⁺ , J.K.G. Watson Overtone spectra and anharmonic resonances in haloacetylenes, A.F. Borro, I.M. Mills and	190 (1995) 291
A. Mose	190 (1995) 363
Simplified models for anharmonic numbers and densities of vibrational states. I. Application	1,0 (1,,0) 505
to NO ₂ and H ₃ ⁺ , J. Troe	190 (1995) 381
Molecular dynamics and scattering theory	
Fourfold clusters of rovibrational energies in H ₂ Te studied with an ab initio potential energy	
function, P. Jensen, Y. Li, G. Hirsch, R.J. Buenker, T.J. Lee and I.N. Kozin Vibration-rotation spectra of ¹³ C containing acetylene: anharmonic resonances, E. Venuti,	190 (1995) 179
G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills	190 (1995) 279
Short time quantum phase space dynamics at a 1:2 Fermi resonance, M.S. Child, G. Bruun and R. Paul	190 (1995) 373
Experimental	
Magnetic resonances	
Overtone spectroscopy and dynamics in monodeuteroacetylene (C ₂ HD), J. Liévin, M. Abbouti Temsamani, P. Gaspard and M. Herman	190 (1995) 419
Microwave spectroscopy	
High-order torsional couplings in the infrared spectrum of 3,3,3-trifluoropropene,	
A. Ainetschian, G.T. Fraser, B.H. Pate and R.D. Suenram	190 (1995) 231
Infrared spectroscopy	
Dimethylacetylene: the theory required to analyse the infrared and Raman perpendicular	190 (1995) 159
bands, P.R. Bunker and C. Di Lauro Sensitive photoacoustic overtone spectroscopy of acetylene with a multipass photoacoustic	190 (1993) 139
cell and a colour centre laser at 1.5 μ m, Ch. Hornberger, M. König, S.B. Rai and	
W. Demtröder	190 (1995) 171
Intramolecular vibrational dynamics of diacetylene and diacetylene- d_1 via eigenstate-	
resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang,	
K.K. Lehmann and G. Scoles	190 (1995) 191

High-order torsional couplings in the infrared spectrum of 3,3,3-trifluoropropene,	190 (1995) 231
A. Ainetschian, G.T. Fraser, B.H. Pate and R.D. Suenram Overtone spectroscopy of isobutane at cryogenic temperatures, C. Manzanares I., J. Peng,	190 (1993) 231
N. Mina-Camilde and A. Brock	190 (1995) 247
Vibration-rotation spectra of ¹³ C containing acetylene: anharmonic resonances, E. Venuti,	.,, (.,,,,,,
G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills	190 (1995) 279
The vibration-rotation spectrum and anharmonic potential of H ₃ ⁺ , J.K.G. Watson	190 (1995) 291
Overtone spectra and anharmonic resonances in haloacetylenes, A.F. Borro, I.M. Mills and	
A. Mose	190 (1995) 363
The intramolecular dynamics of allene in the region around 6000 cm ⁻¹ via eigenstate	100 (1005) 202
resolved IR spectroscopy, J.H. Timmermans, K.K. Lehmann and G. Scoles	190 (1995) 393
High resolution spectroscopic study of the first overtone of the N-H stretch and of the fundamentals of the C-H stretches in pyrrole, A. Held and M. Herman	190 (1995) 407
Overtone spectroscopy and dynamics in monodeuteroacetylene (C ₂ HD), J. Liévin,	190 (1993) 407
M. Abbouti Temsamani, P. Gaspard and M. Herman	190 (1995) 419
and the contract of the contra	110 (1110) 111
*** ***	
Visible and UV spectroscopy	100 (1005) 52
A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+} , F.R. Bennett Dimethylacetylene: the theory required to analyse the infrared and Raman perpendicular	190 (1995) 53
bands, P.R. Bunker and C. Di Lauro	190 (1995) 159
Jet cooled NO ₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and	170 (1775) 157
16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat,	
M. Chenevier and F. Stoeckel	190 (1995) 207
Fluorescence spectroscopy	
Fluorescence spectroscopy Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of	
Fluorescence spectroscopy Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi$ - $\tilde{X}^2\Sigma^+$ system of SrOH, P.I. Presunka and J.A. Coxon	190 (1995) 97
Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of	190 (1995) 97
Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of SrOH, P.I. Presunka and J.A. Coxon	190 (1995) 97
Laser excitation and dispersed fluorescence investigations of the à ² Π-à ² Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods	190 (1995) 97
 Laser excitation and dispersed fluorescence investigations of the à ²Π-X ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-X ²Σ + system of 	
Laser excitation and dispersed fluorescence investigations of the à ² Π-à ² Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods	190 (1995) 97 190 (1995) 97
 Laser excitation and dispersed fluorescence investigations of the à ²Π-X ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-X ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon 	
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate- 	190 (1995) 97
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, 	190 (1995) 97 190 (1995) 123
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles 	190 (1995) 97
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 	190 (1995) 97 190 (1995) 123
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, 	190 (1995) 97 190 (1995) 123 190 (1995) 191
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel 	190 (1995) 97 190 (1995) 123
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small 	190 (1995) 97 190 (1995) 123 190 (1995) 191 190 (1995) 207
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small polyatomic molecules: mechanistic insights and observations, B.J. Orr 	190 (1995) 97 190 (1995) 123 190 (1995) 191 190 (1995) 207 190 (1995) 261
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser methods Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small polyatomic molecules: mechanistic insights and observations, B.J. Orr The 3ν₁+ν₃ vibrational overtone spectrum of ¹³CH₄, K. Boraas and J.P. Reilly 	190 (1995) 97 190 (1995) 123 190 (1995) 191 190 (1995) 207
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ ⁺ system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small polyatomic molecules: mechanistic insights and observations, B.J. Orr 	190 (1995) 97 190 (1995) 123 190 (1995) 191 190 (1995) 207 190 (1995) 261
 Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser excitation and dispersed fluorescence investigations of the à ²Π-ᾶ ²Σ + system of SrOH, P.I. Presunka and J.A. Coxon Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone Intramolecular vibrational dynamics of diacetylene and diacetylene-d₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles Jet cooled NO₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and 16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat, M. Chenevier and F. Stoeckel Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small polyatomic molecules: mechanistic insights and observations, B.J. Orr The 3ν₁ + ν₃ vibrational overtone spectrum of ¹³CH₄, K. Boraas and J.P. Reilly Direct observation of weak state mixing in highly vibrationally excited acetylene, A.L. Utz, 	190 (1995) 97 190 (1995) 123 190 (1995) 191 190 (1995) 207 190 (1995) 261 190 (1995) 301

Non-linear optical spectroscopy	
Theory of second harmonic generation in randomly oriented species, D.L. Andrews, P. Allcock and A.A. Demidov	190 (1995) 1
Multiple resonance spectroscopy	
Intramolecular vibrational dynamics of diacetylene and diacetylene-d ₁ via eigenstate-resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles	100 (1005) 101
High-order torsional couplings in the infrared spectrum of 3,3,3-trifluoropropene,	190 (1995) 191
A. Ainetschian, G.T. Fraser, B.H. Pate and R.D. Suenram	190 (1995) 231
Optoacoustic spectroscopy	
Sensitive photoacoustic overtone spectroscopy of acetylene with a multipass photoacoustic cell and a colour centre laser at 1.5 μ m, Ch. Hornberger, M. König, S.B. Rai and	
W. Demtröder	190 (1995) 171
Overtone spectroscopy of isobutane at cryogenic temperatures, C. Manzanares I., J. Peng,	
N. Mina-Camilde and A. Brock	190 (1995) 247
The $3\nu_1 + \nu_3$ vibrational overtone spectrum of $^{13}\text{CH}_4$, K. Boraas and J.P. Reilly	190 (1995) 301
Atomia and molecular beam techniques	
Atomic and molecular beam techniques Charge inversion of ground-state and metastable-state C_2^+ cations formed from electroionised	
C_2H_2 and C_2N_2 , and a re-evaluation of the carbon dimer's ionisation energy, C.J. Reid,	
J.A. Ballantine, S.R. Andrews and F.M. Harris	190 (1995) 113
Chemiluminescence quasi-continua in collisions of Ca(1S), Sr(1S) and Mg*(3P) atoms	, , , , , , , , , , , , , , , , , , , ,
with I2, P. Kierzkowski, R. Ławruszczuk and A. Kowalski	190 (1995) 131
Single and double electron capture in H ⁺ on Kr collisions at low-keV energies, H. Martínez,	
B.E. Fuentes, I. Alvarez, C. Cisneros and J. de Urquijo	190 (1995) 139
Intramolecular vibrational dynamics of diacetylene and diacetylene- d_1 via eigenstate-	
resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang, K.K. Lehmann and G. Scoles	190 (1995) 191
The intramolecular dynamics of allene in the region around 6000 cm ⁻¹ via eigenstate	190 (1993) 191
resolved IR spectroscopy, J.H. Timmermans, K.K. Lehmann and G. Scoles	190 (1995) 393
, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
Time-resolved experiments	
An assessment of the role of polaron formation to hole transport in a triarylamine doped	
polymer, M. Van der Auweraer, G. Verbeek, F.C. De Schryver and P.M. Borsenberger	190 (1995) 31
Lack of ionic strength effect in the recombination of hydrated electrons:	100 (1005) 145
$(e^-)_{aq} + (e^-)_{aq} \rightarrow 2(OH^-) + H_2$, K.H. Schmidt and D.M. Bartels Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small	190 (1995) 145
polyatomic molecules: mechanistic insights and observations, B.J. Orr	190 (1995) 261
Mass spectrometry	
Charge inversion of ground-state and metastable-state C ₂ ⁺ cations formed from electroionised	
C_2H_2 and C_2N_2 , and a re-evaluation of the carbon dimer's ionisation energy, C.J. Reid,	
J.A. Ballantine, S.R. Andrews and F.M. Harris	190 (1995) 113
Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee,	
M. Manning and S.R. Leone	190 (1995) 123

Objects

Bulk systems

G		
Gases Fourfold clusters of rovibrational energies in H ₂ Te studied with an ab initio potential energy		
function, P. Jensen, Y. Li, G. Hirsch, R.J. Buenker, T.J. Lee and I.N. Kozin	190 (1995)	179
The $3\nu_1 + \nu_3$ vibrational overtone spectrum of $^{13}\text{CH}_4$, K. Boraas and J.P. Reilly	190 (1995)	
Direct observation of weak state mixing in highly vibrationally excited acetylene, A.L. Utz,		
E. Carrasquillo M., J.D. Tobiason and F.F. Crim	190 (1995)	311
Supersonic beams		
Jet cooled NO ₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and		
16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat,		
M. Chenevier and F. Stoeckel	190 (1995)	207
Liquids neat		
Structure and dynamics of liquid formamide, Y.P. Puhovski and B.M. Rode	190 (1995)	61
Liquids mixtures and solutions		
Examination of the viability of the Collins–Kimball model and numerical calculation of the		
time-dependent energy gap law of photoinduced charge separation in polar solution,		
N. Matsuda, T. Kakitani, T. Denda and N. Mataga	190 (1995)	83
Overtone spectroscopy of isobutane at cryogenic temperatures, C. Manzanares I., J. Peng,		
N. Mina-Camilde and A. Brock	190 (1995)	247
Polymers		
An assessment of the role of polaron formation to hole transport in a triarylamine doped		
polymer, M. Van der Auweraer, G. Verbeek, F.C. De Schryver and P.M. Borsenberger	190 (1995)	31
Biological systems		
Theory of second harmonic generation in randomly oriented species, D.L. Andrews,		
P. Allcock and A.A. Demidov	190 (1995)	1
Microscopic systems		
Molecules (neutral and ionic)		
-diatomic		
Response theory calculations of singlet-triplet transitions in molecular nitrogen, B. Minaev,		
P. Norman, D. Jonsson and H. Ågren	190 (1995)	11
A theoretical study of the transition moments, Einstein A coefficients, and radiative lifetimes		
of the lowest triplet states of BeC, A.C. Borin and F.R. Ornellas	190 (1995)	
A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+} , F.R. Bennett	190 (1995)	53
-small polyatomics		
Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of		
SrOH, P.I. Presunka and J.A. Coxon	190 (1995)	97

Chamiltonian and antique is callisians of Ca(IS) Sa(IS) and Ma*(3D) atoms	
Chemiluminescence quasi-continua in collisions of Ca(¹ S), Sr(¹ S) and Mg*(³ P) atoms with I ₂ , P. Kierzkowski, R. Ławruszczuk and A. Kowalski	190 (1995) 131
Dimethylacetylene: the theory required to analyse the infrared and Raman perpendicular	190 (1993) 131
bands, P.R. Bunker and C. Di Lauro	190 (1995) 159
Sensitive photoacoustic overtone spectroscopy of acetylene with a multipass photoacoustic	170 (1775) 137
cell and a colour centre laser at 1.5 μ m, Ch. Hornberger, M. König, S.B. Rai and	
W. Demtröder	190 (1995) 171
Fourfold clusters of rovibrational energies in H ₂ Te studied with an ab initio potential energy	170 (1775) 171
function, P. Jensen, Y. Li, G. Hirsch, R.J. Buenker, T.J. Lee and I.N. Kozin	190 (1995) 179
Jet cooled NO ₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and	.,, (.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat,	
M. Chenevier and F. Stoeckel	190 (1995) 207
Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small	(,
polyatomic molecules: mechanistic insights and observations, B.J. Orr	190 (1995) 261
Vibration-rotation spectra of ¹³ C containing acetylene: anharmonic resonances, E. Venuti,	, , , , , , , , , , , , , , , , , , , ,
G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills	190 (1995) 279
The vibration-rotation spectrum and anharmonic potential of H ₃ ⁺ , J.K.G. Watson	190 (1995) 291
The $3\nu_1 + \nu_3$ vibrational overtone spectrum of $^{13}\text{CH}_4$, K. Boraas and J.P. Reilly	190 (1995) 301
Direct observation of weak state mixing in highly vibrationally excited acetylene, A.L. Utz,	
E. Carrasquillo M., J.D. Tobiason and F.F. Crim	190 (1995) 311
An improved anharmonic force field of CHClF ₂ , P. Palmieri, R. Tarroni, M.M. Hühn,	
N.C. Handy and A. Willetts	190 (1995) 327
Ab initio calculations of stretching vibrational transitions for the linear molecules HCN,	
HNC, HCCF and HC ₃ N up to high overtones, P. Botschwina, B. Schulz, M. Horn and	
M. Matuschewski	190 (1995) 345
Overtone spectra and anharmonic resonances in haloacetylenes, A.F. Borro, I.M. Mills and	
A. Mose	190 (1995) 363
Short time quantum phase space dynamics at a 1:2 Fermi resonance, M.S. Child, G. Bruun	
and R. Paul	190 (1995) 373
Simplified models for anharmonic numbers and densities of vibrational states. I. Application	
to NO ₂ and H ₃ ⁺ , J. Troe	190 (1995) 381
The intramolecular dynamics of allene in the region around 6000 cm ⁻¹ via eigenstate	
resolved IR spectroscopy, J.H. Timmermans, K.K. Lehmann and G. Scoles	190 (1995) 393
-aromatics	
High resolution spectroscopic study of the first overtone of the N-H stretch and of the	100 (1005) 107
fundamentals of the C-H stretches in pyrrole, A. Held and M. Herman	190 (1995) 407
Overtone spectroscopy and dynamics in monodeuteroacetylene (C ₂ HD), J. Liévin,	100 (1005) 410
M. Abbouti Temsamani, P. Gaspard and M. Herman	190 (1995) 419
Malandan appropriate	
Molecular aggregates Theory of second harmonic generation in randomly oriented species, D.L. Andrews,	
P. Allcock and A.A. Demidov	190 (1995) 1
1. Allcock and A.A. Defindov	190 (1993)
Free radicals (including hydronium and muonium)	
Lack of ionic strength effect in the recombination of hydrated electrons:	
$(e^-)_{aq} + (e^-)_{aq} \rightarrow 2(OH^-) + H_2$, K.H. Schmidt and D.M. Bartels	190 (1995) 145
(/aq () /aq () / /) /	()

Charge inversion of ground-state and metastable-state C_2^+ cations formed from electroionised C_2H_2 and C_2N_2 , and a re-evaluation of the carbon dimer's ionisation energy, C.J. Reid, J.A. Ballantine, S.R. Andrews and F.M. Harris 190 (1995) 113 Laser photodissociation of fluorinated molecular dications, S.D. Price, Y.-Y. Lee, M. Manning and S.R. Leone 190 (1995) 123 Lack of ionic strength effect in the recombination of hydrated electrons: $(e^-)_{aq} + (e^-)_{aq} \rightarrow 2(OH^-) + H_2$, K.H. Schmidt and D.M. Bartels 190 (1995) 145

Phenomena

Molecular structure	
An improved anharmonic force field of CHClF ₂ , P. Palmieri, R. Tarroni, M.M. Hühn, N.C. Handy and A. Willetts	190 (1995) 327
Vibrations and rotations of molecules	
Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi$ - $\tilde{X}^2\Sigma$ + system of	
SrOH, P.I. Presunka and J.A. Coxon	190 (1995) 97
Dimethylacetylene: the theory required to analyse the infrared and Raman perpendicular bands, P.R. Bunker and C. Di Lauro	190 (1995) 159
Sensitive photoacoustic overtone spectroscopy of acetylene with a multipass photoacoustic cell and a colour centre laser at 1.5 μ m, Ch. Hornberger, M. König, S.B. Rai and	
W. Demtröder	190 (1995) 171
Fourfold clusters of rovibrational energies in H ₂ Te studied with an ab initio potential energy	
function, P. Jensen, Y. Li, G. Hirsch, R.J. Buenker, T.J. Lee and I.N. Kozin	190 (1995) 179
Intramolecular vibrational dynamics of diacetylene and diacetylene- d_1 via eigenstate-	
resolved overtone spectroscopy, J.E. Gambogi, R. Zachary Pearson, X. Yang,	
K.K. Lehmann and G. Scoles	190 (1995) 191
High-order torsional couplings in the infrared spectrum of 3,3,3-trifluoropropene,	
A. Ainetschian, G.T. Fraser, B.H. Pate and R.D. Suenram	190 (1995) 231
Overtone spectroscopy of isobutane at cryogenic temperatures, C. Manzanares I., J. Peng,	
N. Mina-Camilde and A. Brock	190 (1995) 247
Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small	
polyatomic molecules: mechanistic insights and observations, B.J. Orr	190 (1995) 261
Vibration-rotation spectra of ¹³ C containing acetylene: anharmonic resonances, E. Venuti,	
G. Di Lonardo, P. Ferracuti, L. Fusina and I.M. Mills	190 (1995) 279
The vibration-rotation spectrum and anharmonic potential of H ₃ ⁺ , J.K.G. Watson	190 (1995) 291
The $3\nu_1 + \nu_3$ vibrational overtone spectrum of $^{13}\text{CH}_4$, K. Boraas and J.P. Reilly	190 (1995) 301
Direct observation of weak state mixing in highly vibrationally excited acetylene, A.L. Utz,	
E. Carrasquillo M., J.D. Tobiason and F.F. Crim	190 (1995) 311
An improved anharmonic force field of CHClF ₂ , P. Palmieri, R. Tarroni, M.M. Hühn,	
N.C. Handy and A. Willetts	190 (1995) 327
Ab initio calculations of stretching vibrational transitions for the linear molecules HCN,	
HNC, HCCF and HC ₃ N up to high overtones, P. Botschwina, B. Schulz, M. Horn and	
M. Matuschewski	190 (1995) 345

Overtone spectra and anharmonic resonances in haloacetylenes, A.F. Borro, I.M. Mills and	
A. Mose	190 (1995) 363
High resolution spectroscopic study of the first overtone of the N-H stretch and of the	•
fundamentals of the C-H stretches in pyrrole, A. Held and M. Herman	190 (1995) 407
Electronic structure and states	
Response theory calculations of singlet-triplet transitions in molecular nitrogen, B. Minaev,	
P. Norman, D. Jonsson and H. Ågren	190 (1995) 11
A theoretical study of the transition moments, Einstein A coefficients, and radiative lifetimes	
of the lowest triplet states of BeC, A.C. Borin and F.R. Ornellas	190 (1995) 43
A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+} , F.R. Bennett	190 (1995) 53
Laser excitation and dispersed fluorescence investigations of the $\tilde{A}^2\Pi - \tilde{X}^2\Sigma^+$ system of	170 (1770) 33
	100 (1005) 07
SrOH, P.I. Presunka and J.A. Coxon	190 (1995) 97
Charge inversion of ground-state and metastable-state C ₂ ⁺ cations formed from electroionised	
C ₂ H ₂ and C ₂ N ₂ , and a re-evaluation of the carbon dimer's ionisation energy, C.J. Reid,	
J.A. Ballantine, S.R. Andrews and F.M. Harris	190 (1995) 113
Electric and magnetic properties	
Ab initio calculations of stretching vibrational transitions for the linear molecules HCN,	
HNC, HCCF and HC ₃ N up to high overtones, P. Botschwina, B. Schulz, M. Horn and	
M. Matuschewski	190 (1995) 345
	.,, (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Spectral bandshapes and intensities	
High resolution spectroscopic study of the first overtone of the N-H stretch and of the	
	190 (1995) 407
fundamentals of the C-H stretches in pyrrole, A. Held and M. Herman	190 (1993) 407
Overtone spectroscopy and dynamics in monodeuteroacetylene (C ₂ HD), J. Liévin,	100 (1002) 110
M. Abbouti Temsamani, P. Gaspard and M. Herman	190 (1995) 419
Coupling of electronic and nuclear motion	
Jet cooled NO ₂ intra cavity laser absorption spectroscopy (ICLAS) between 11200 and	
16150 cm, R. Georges, A. Delon, F. Bylicki, R. Jost, A. Campargue, A. Charvat,	
M. Chenevier and F. Stoeckel	190 (1995) 207
Energy transfer processes	
Collision-induced state-to-state energy transfer in perturbed rovibrational manifolds of small	
polyatomic molecules: mechanistic insights and observations, B.J. Orr	190 (1995) 261
Molecular photophysical processes	
Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee,	
M. Manning and S.R. Leone	190 (1995) 123
Simplified models for anharmonic numbers and densities of vibrational states. I. Application	
to NO ₂ and H ₃ ⁺ , J. Troe	190 (1995) 381
101102 and 113 , 0. 1100	170 (1770) 501
Intramolecular dynamics	
Short time quantum phase space dynamics at a 1:2 Fermi resonance, M.S. Child, G. Bruun	
and R. Paul	190 (1995) 373
	190 (1993) 3/3
High resolution spectroscopic study of the first overtone of the N-H stretch and of the	100 (1006) 407
fundamentals of the C-H stretches in pyrrole, A. Held and M. Herman	190 (1995) 407

-vibrational energy redistribution (including vibrational dissociation)	
High-order torsional couplings in the infrared spectrum of 3,3,3-trifluoropropene, A. Ainetschian, G.T. Fraser, B.H. Pate and R.D. Suenram Direct observation of weak state mixing in highly vibrationally excited acetylene, A.L. Utz,	190 (1995) 231
E. Carrasquillo M., J.D. Tobiason and F.F. Crim	190 (1995) 311
Overtone spectra and anharmonic resonances in haloacetylenes, A.F. Borro, I.M. Mills and A. Mose	190 (1995) 363
Short time quantum phase space dynamics at a 1:2 Fermi resonance, M.S. Child, G. Bruun and R. Paul	190 (1995) 373
Simplified models for anharmonic numbers and densities of vibrational states. I. Application to NO ₂ and H ₃ ⁺ , J. Troe	190 (1995) 381
The intramolecular dynamics of allene in the region around 6000 cm ⁻¹ via eigenstate resolved IR spectroscopy, J.H. Timmermans, K.K. Lehmann and G. Scoles	190 (1995) 393
Overtone spectroscopy and dynamics in monodeuteroacetylene (C ₂ HD), J. Liévin, M. Abbouti Temsamani, P. Gaspard and M. Herman	190 (1995) 419
W. Abboutt Tellisamani, F. Gaspard and W. Herman	190 (1993) 419
Luminescence spectra, yields and lifetimes Response theory calculations of singlet transitions in molecular nitrogen R Minaey	
Response theory calculations of singlet-triplet transitions in molecular nitrogen, B. Minaev, P. Norman, D. Jonsson and H. Ågren	190 (1995) 11
A theoretical study of the transition moments, Einstein A coefficients, and radiative lifetimes of the lowest triplet states of BeC, A.C. Borin and F.R. Ornellas	190 (1995) 43
Multiphoton phenomena	
Theory of second harmonic generation in randomly oriented species, D.L. Andrews, P. Allcock and A.A. Demidov	190 (1995) 1
Reactions (including dissociation)	
-gas phase	
Laser photodissociation of fluorinated molecular dications, S.D. Price, YY. Lee, M. Manning and S.R. Leone	190 (1995) 123
Chemiluminescence quasi-continua in collisions of Ca(1S), Sr(1S) and Mg*(3P) atoms with I ₂ , P. Kierzkowski, R. Ławruszczuk and A. Kowalski	190 (1995) 131
	,
-condensed phase Lack of ionic strength effect in the recombination of hydrated electrons:	
$(e^-)_{aq} + (e^-)_{aq} \rightarrow 2(OH^-) + H_2$, K.H. Schmidt and D.M. Bartels	190 (1995) 145
Tunneling	
A theoretical reinvestigation of the $\tilde{A}^{1}\Pi_{u}$ state of N_{2}^{2+} , F.R. Bennett	190 (1995) 53
Electron transfer	
An assessment of the role of polaron formation to hole transport in a triarylamine doped polymer, M. Van der Auweraer, G. Verbeek, F.C. De Schryver and P.M. Borsenberger	190 (1995) 31
Examination of the viability of the Collins-Kimball model and numerical calculation of the time-dependent energy gap law of photoinduced charge separation in polar solution,	
N. Matsuda, T. Kakitani, T. Denda and N. Mataga	190 (1995) 83

Charge inversion of ground-state and metastable-state C ₂ ⁺ cations formed from electroionised C ₂ H ₂ and C ₂ N ₂ , and a re-evaluation of the carbon dimer's ionisation energy, C.J. Reid, J.A. Ballantine, S.R. Andrews and F.M. Harris	190 (1995) 113
Single and double electron capture in H ⁺ on Kr collisions at low-keV energies, H. Martínez,	100 (1005) 100
B.E. Fuentes, I. Alvarez, C. Cisneros and J. de Urquijo	190 (1995) 139
Molecular motion (including diffusive)	
Structure and dynamics of liquid formamide, Y.P. Puhovski and B.M. Rode	190 (1995) 61
Examination of the viability of the Collins-Kimball model and numerical calculation of the time-dependent energy gap law of photoinduced charge separation in polar solution,	100 (1005) 82
N. Matsuda, T. Kakitani, T. Denda and N. Mataga	190 (1995) 83
Lack of ionic strength effect in the recombination of hydrated electrons: $(e^{-})_{aq} + (e^{-})_{aq} \rightarrow 2(OH^{-}) + H_2$, K.H. Schmidt and D.M. Bartels	190 (1995) 145
Thermodynamic and transport properties	
An assessment of the role of polaron formation to hole transport in a triarylamine doped polymer, M. Van der Auweraer, G. Verbeek, F.C. De Schryver and P.M. Borsenberger	190 (1995) 31

